

WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTERS  
PATENT OF THE UNITED STATES IS:

1. L-carnitine, having a particle size such that it substantially passes through a  
100 USBS mesh sieve.

5           2. The L-carnitine of Claim 1, which is selected from the group consisting of  
L-carnitine, salts of L-carnitine, alkanoyl L-carnitines, and salts of alkanoyl L-  
carnitine.

3. The L-carnitine of Claim 1, which is selected from the group consisting of  
L-carnitine chloride, L-carnitine bromide, L-carnitine orotate, L-carnitine acid  
10   aspartate, L-carnitine acid phosphate, L-carnitine fumarate, L-carnitine lactate, L-  
carnitine maleate, L-carnitine acid maleate, L-carnitine acid oxalate, L-carnitine acid  
sulfate, L-carnitine glucose phosphate, L-carnitine tartrate, L-carnitine acid tartrate,  
L-carnitine iodate, L-carnitine aspartate, L-carnitine citrate, L-carnitine acid citrate,  
L-carnitine acid fumarate, L-carnitine glycerophosphate, L-carnitine mucate, L-  
15   carnitine orotate, L-carnitine oxalate, L-carnitine sulfate, L-carnitine trichloroacetate,  
L-carnitine trifluoroacetate, L-carnitine methanesulfonate, L-carnitine pamoate, L-  
carnitine acid pamoate, C<sub>2-8</sub> alkanoyl L-carnitines, C<sub>2-8</sub> alkanoyl L-carnitine chloride,  
C<sub>2-8</sub> alkanoyl L-carnitine bromide, C<sub>2-8</sub> alkanoyl L-carnitine orotate, C<sub>2-8</sub> alkanoyl L-  
carnitine acid aspartate, C<sub>2-8</sub> alkanoyl L-carnitine acid phosphate, C<sub>2-8</sub> alkanoyl L-  
20   carnitine fumarate, C<sub>2-8</sub> alkanoyl L-carnitine lactate, C<sub>2-8</sub> alkanoyl L-carnitine maleate,  
C<sub>2-8</sub> alkanoyl L-carnitine acid maleate, C<sub>2-8</sub> alkanoyl L-carnitine acid oxalate, C<sub>2-8</sub>  
alkanoyl L-carnitine acid sulfate, C<sub>2-8</sub> alkanoyl L-carnitine glucose phosphate, C<sub>2-8</sub>  
alkanoyl L-carnitine tartrate, C<sub>2-8</sub> alkanoyl L-carnitine acid tartrate, C<sub>2-8</sub> alkanoyl L-  
carnitine iodate, C<sub>2-8</sub> alkanoyl L-carnitine aspartate, C<sub>2-8</sub> alkanoyl L-carnitine citrate,  
25   C<sub>2-8</sub> alkanoyl L-carnitine acid citrate, C<sub>2-8</sub> alkanoyl L-carnitine acid fumarate, C<sub>2-8</sub>

alkanoyl L-carnitine glycerophosphate, C<sub>2-8</sub> alkanoyl L-carnitine mucate, C<sub>2-8</sub> alkanoyl L-carnitine orotate, C<sub>2-8</sub> alkanoyl L-carnitine oxalate, C<sub>2-8</sub> alkanoyl L-carnitine sulfate, C<sub>2-8</sub> alkanoyl L-carnitine trichloroacetate, C<sub>2-8</sub> alkanoyl L-carnitine trifluoroacetate, C<sub>2-8</sub> alkanoyl L-carnitine methanesulfonate, C<sub>2-8</sub> alkanoyl L-carnitine pamoate, and C<sub>2-8</sub> alkanoyl L-carnitine acid pamoate.

4. A method of preparing L-carnitine, having a particle size such that it substantially passes through a 100 USBS mesh sieve, comprising:

(1) subjecting L-carnitine having a particle size such that it does not pass through a 100 USBS mesh sieve to size reduction, to obtain size-reduced L-carnitine;

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(2) subjecting said size-reduced L-carnitine to sieving through a 100 USBS mesh sieve and selecting that portion which passes through said 100 USBS mesh sieve.

5. The method of Claim 4, wherein said L-carnitine is selected from the group consisting of L-carnitine, salts of L-carnitine, alkanoyl L-carnitines, and salts of alkanoyl L-carnitine.

6. The method of Claim 4, wherein said L-carnitine is selected from the group consisting of L-carnitine chloride, L-carnitine bromide, L-carnitine orotate, L-carnitine acid aspartate, L-carnitine acid phosphate, L-carnitine fumarate, L-carnitine lactate, L-carnitine maleate, L-carnitine acid maleate, L-carnitine acid oxalate, L-carnitine acid sulfate, L-carnitine glucose phosphate, L-carnitine tartrate, L-carnitine acid tartrate, L-carnitine iodate, L-carnitine aspartate, L-carnitine citrate, L-carnitine acid citrate, L-carnitine acid fumarate, L-carnitine glycerophosphate, L-carnitine mucate, L-carnitine orotate, L-carnitine oxalate, L-carnitine sulfate, L-carnitine

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trichloroacetate, L-carnitine trifluoroacetate, L-carnitine methanesulfonate, L-carnitine pamoate, L-carnitine acid pamoate, C<sub>2-8</sub> alkanoyl L-carnitines, C<sub>2-8</sub> alkanoyl L-carnitine chloride, C<sub>2-8</sub> alkanoyl L-carnitine bromide, C<sub>2-8</sub> alkanoyl L-carnitine orotate, C<sub>2-8</sub> alkanoyl L-carnitine acid aspartate, C<sub>2-8</sub> alkanoyl L-carnitine acid phosphate, C<sub>2-8</sub> alkanoyl L-carnitine fumarate, C<sub>2-8</sub> alkanoyl L-carnitine lactate, C<sub>2-8</sub> alkanoyl L-carnitine maleate, C<sub>2-8</sub> alkanoyl L-carnitine acid maleate, C<sub>2-8</sub> alkanoyl L-carnitine acid oxalate, C<sub>2-8</sub> alkanoyl L-carnitine acid sulfate, C<sub>2-8</sub> alkanoyl L-carnitine glucose phosphate, C<sub>2-8</sub> alkanoyl L-carnitine tartrate, C<sub>2-8</sub> alkanoyl L-carnitine acid tartrate, C<sub>2-8</sub> alkanoyl L-carnitine iodate, C<sub>2-8</sub> alkanoyl L-carnitine aspartate, C<sub>2-8</sub> alkanoyl L-carnitine citrate, C<sub>2-8</sub> alkanoyl L-carnitine acid citrate, C<sub>2-8</sub> alkanoyl L-carnitine acid fumarate, C<sub>2-8</sub> alkanoyl L-carnitine glycerophosphate, C<sub>2-8</sub> alkanoyl L-carnitine mucate, C<sub>2-8</sub> alkanoyl L-carnitine orotate, C<sub>2-8</sub> alkanoyl L-carnitine oxalate, C<sub>2-8</sub> alkanoyl L-carnitine sulfate, C<sub>2-8</sub> alkanoyl L-carnitine trichloroacetate, C<sub>2-8</sub> alkanoyl L-carnitine trifluoroacetate, C<sub>2-8</sub> alkanoyl L-carnitine methanesulfonate, C<sub>2-8</sub> alkanoyl L-carnitine pamoate, and C<sub>2-8</sub> alkanoyl L-carnitine acid pamoate.

7. A composition, comprising:

(A) L-carnitine having a particle size such that it substantially passes through a 100 USBS mesh sieve; and

(B) a pharmaceutically acceptable excipient or carrier.

8. The composition of Claim 7, wherein said L-carnitine is selected from the group consisting of L-carnitine, salts of L-carnitine, alkanoyl L-carnitines, and salts of alkanoyl L-carnitine.

9. The composition of Claim 7, wherein said L-carnitine is selected from the group consisting of L-carnitine chloride, L-carnitine bromide, L-carnitine orotate, L-

carnitine acid aspartate, L-carnitine acid phosphate, L-carnitine fumarate, L-carnitine  
 lactate, L-carnitine maleate, L-carnitine acid maleate, L-carnitine acid oxalate, L-  
 carnitine acid sulfate, L-carnitine glucose phosphate, L-carnitine tartrate, L-carnitine  
 acid tartrate, L-carnitine iodate, L-carnitine aspartate, L-carnitine citrate, L-carnitine  
 5 acid citrate, L-carnitine acid fumarate, L-carnitine glycerophosphate, L-carnitine  
 mucate, L-carnitine orotate, L-carnitine oxalate, L-carnitine sulfate, L-carnitine  
 trichloroacetate, L-carnitine trifluoroacetate, L-carnitine methanesulfonate, L-  
 carnitine pamoate, L-carnitine acid pamoate, C<sub>2-8</sub> alkanoyl L-carnitines, C<sub>2-8</sub> alkanoyl  
 L-carnitine chloride, C<sub>2-8</sub> alkanoyl L-carnitine bromide, C<sub>2-8</sub> alkanoyl L-carnitine  
 10 orotate, C<sub>2-8</sub> alkanoyl L-carnitine acid aspartate, C<sub>2-8</sub> alkanoyl L-carnitine acid  
 phosphate, C<sub>2-8</sub> alkanoyl L-carnitine fumarate, C<sub>2-8</sub> alkanoyl L-carnitine lactate, C<sub>2-8</sub>  
 alkanoyl L-carnitine maleate, C<sub>2-8</sub> alkanoyl L-carnitine acid maleate, C<sub>2-8</sub> alkanoyl L-  
 carnitine acid oxalate, C<sub>2-8</sub> alkanoyl L-carnitine acid sulfate, C<sub>2-8</sub> alkanoyl L-carnitine  
 glucose phosphate, C<sub>2-8</sub> alkanoyl L-carnitine tartrate, C<sub>2-8</sub> alkanoyl L-carnitine acid  
 15 tartrate, C<sub>2-8</sub> alkanoyl L-carnitine iodate, C<sub>2-8</sub> alkanoyl L-carnitine aspartate, C<sub>2-8</sub>  
 alkanoyl L-carnitine citrate, C<sub>2-8</sub> alkanoyl L-carnitine acid citrate, C<sub>2-8</sub> alkanoyl L-  
 carnitine acid fumarate, C<sub>2-8</sub> alkanoyl L-carnitine glycerophosphate, C<sub>2-8</sub> alkanoyl L-  
 carnitine mucate, C<sub>2-8</sub> alkanoyl L-carnitine orotate, C<sub>2-8</sub> alkanoyl L-carnitine oxalate,  
 C<sub>2-8</sub> alkanoyl L-carnitine sulfate, C<sub>2-8</sub> alkanoyl L-carnitine trichloroacetate, C<sub>2-8</sub>  
 20 alkanoyl L-carnitine trifluoroacetate, C<sub>2-8</sub> alkanoyl L-carnitine methanesulfonate, C<sub>2-8</sub>  
 alkanoyl L-carnitine pamoate, and C<sub>2-8</sub> alkanoyl L-carnitine acid pamoate.

10. The composition of Claim 7, which is suitable for oral ingestion.

11. The composition of Claim 7, which further comprises hydroxycitric acid, Co-enzyme Q10, chromium picolinate, gamma linolenic acid, resveratrol, omega 3 acids, an antioxidant, or a vitamin.

12. In a method of treatment, therapy, or prevention, comprising orally administering an effective amount of L-carnitine to a subject in need thereof, the improvement being said L-carnitine has a particle size such that it substantially passes through a 100 USBS mesh sieve.

13. The method of Claim 12, wherein said L-carnitine is selected from the group consisting of L-carnitine, salts of L-carnitine, alkanoyl L-carnitines, and salts of alkanoyl L-carnitine.

14. The method of Claim 12, wherein said L-carnitine is selected from the group consisting of L-carnitine chloride, L-carnitine bromide, L-carnitine orotate, L-carnitine acid aspartate, L-carnitine acid phosphate, L-carnitine fumarate, L-carnitine lactate, L-carnitine maleate, L-carnitine acid maleate, L-carnitine acid oxalate, L-carnitine acid sulfate, L-carnitine glucose phosphate, L-carnitine tartrate, L-carnitine acid tartrate, L-carnitine iodate, L-carnitine aspartate, L-carnitine citrate, L-carnitine acid citrate, L-carnitine acid fumarate, L-carnitine glycerophosphate, L-carnitine mucate, L-carnitine orotate, L-carnitine oxalate, L-carnitine sulfate, L-carnitine trichloroacetate, L-carnitine trifluoroacetate, L-carnitine methanesulfonate, L-carnitine pamoate, L-carnitine acid pamoate, C<sub>2-8</sub> alkanoyl L-carnitines, C<sub>2-8</sub> alkanoyl L-carnitine chloride, C<sub>2-8</sub> alkanoyl L-carnitine bromide, C<sub>2-8</sub> alkanoyl L-carnitine orotate, C<sub>2-8</sub> alkanoyl L-carnitine acid aspartate, C<sub>2-8</sub> alkanoyl L-carnitine acid phosphate, C<sub>2-8</sub> alkanoyl L-carnitine fumarate, C<sub>2-8</sub> alkanoyl L-carnitine lactate, C<sub>2-8</sub> alkanoyl L-carnitine maleate, C<sub>2-8</sub> alkanoyl L-carnitine acid maleate, C<sub>2-8</sub> alkanoyl L-

- carnitine acid oxalate, C<sub>2-8</sub> alkanoyl L-carnitine acid sulfate, C<sub>2-8</sub> alkanoyl L-carnitine glucose phosphate, C<sub>2-8</sub> alkanoyl L-carnitine tartrate, C<sub>2-8</sub> alkanoyl L-carnitine acid tartrate, C<sub>2-8</sub> alkanoyl L-carnitine iodate, C<sub>2-8</sub> alkanoyl L-carnitine aspartate, C<sub>2-8</sub> alkanoyl L-carnitine citrate, C<sub>2-8</sub> alkanoyl L-carnitine acid citrate, C<sub>2-8</sub> alkanoyl L-
- 5 carnitine acid fumarate, C<sub>2-8</sub> alkanoyl L-carnitine glycerophosphate, C<sub>2-8</sub> alkanoyl L-carnitine mucate, C<sub>2-8</sub> alkanoyl L-carnitine orotate, C<sub>2-8</sub> alkanoyl L-carnitine oxalate, C<sub>2-8</sub> alkanoyl L-carnitine sulfate, C<sub>2-8</sub> alkanoyl L-carnitine trichloroacetate, C<sub>2-8</sub> alkanoyl L-carnitine trifluoroacetate, C<sub>2-8</sub> alkanoyl L-carnitine methanesulfonate, C<sub>2-8</sub> alkanoyl L-carnitine pamoate, and C<sub>2-8</sub> alkanoyl L-carnitine acid pamoate.